



FCC Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : LTE/CDMA Multi-Mode Digital Mobile Phone
BRAND NAME : ZTE
MODEL NAME : Z233V
FCC ID : SRQ-Z233VL
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Jun. 07, 2017 and testing was completed on Jun. 23, 2017. We, Sporton International (KunShan) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (KunShan) INC., the test report shall not be reproduced except in full.

Prepared by: James Huang / Manager

Approved by: Jones Tsai / Manager



Sporton International (KunShan) INC.

No.3-2, Pingxiang Road, Kunshan Development Zone, Jiangsu, China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC6O1901-03	Rev. 01	Initial issue of report	Jun. 30, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 6.49 dB at 2.422 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 1.18 dB at 959.900 MHz for Quasi-Peak



1. General Description

1.1. Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2. Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE/CDMA Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	Z233V
FCC ID	SRQ-Z233VL
EUT supports Radios application	CDMA/EV-DO/LTE Bluetooth v3.0 + EDR/ Bluetooth v4.0 LE
IMEI Code	Conduction/Radiation: 990008870002388
HW Version	Z233VHWV1.0
SW Version	Z233VV1.0.0B01
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. This is a variant report for Z233V. The product equality declaration could be referred to Appendix B. Based on the similarity between current and previous project, only the worst cases from original test report (Sporton Report Number FC6O1901) were verified for the differences.

1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz
Antenna Type	WWAN : PIFA Antenna Bluetooth : PIFA Antenna GPS : PIFA Antenna
Type of Modulation	LTE: QPSK / 16QAM CDMA2000 : QPSK CDMA2000 1xEV-DO : QPSK/8PSK Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK

1.5. Modification of EUT

No modifications are made to the EUT during all test items.

1.6. Test Location

Test Site	Sporton International (KunShan) INC.		
Test Site Location	No.3-2, Pingxiang Road, Kunshan Development Zone, Jiangsu, China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	Sporton Site No.		FCC Registration No.
	CO01-KS	03CH02-KS	418269

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2. Test Configuration of Equipment Under Test

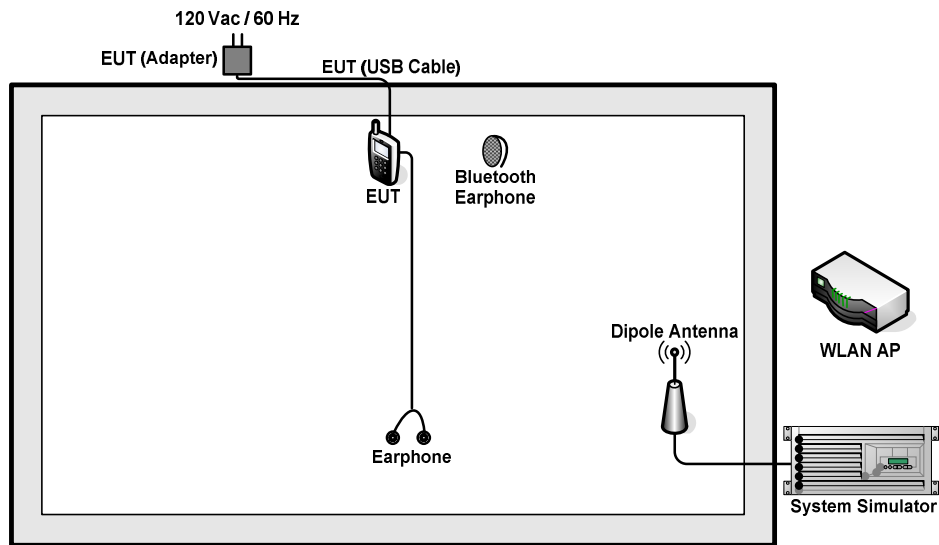
2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

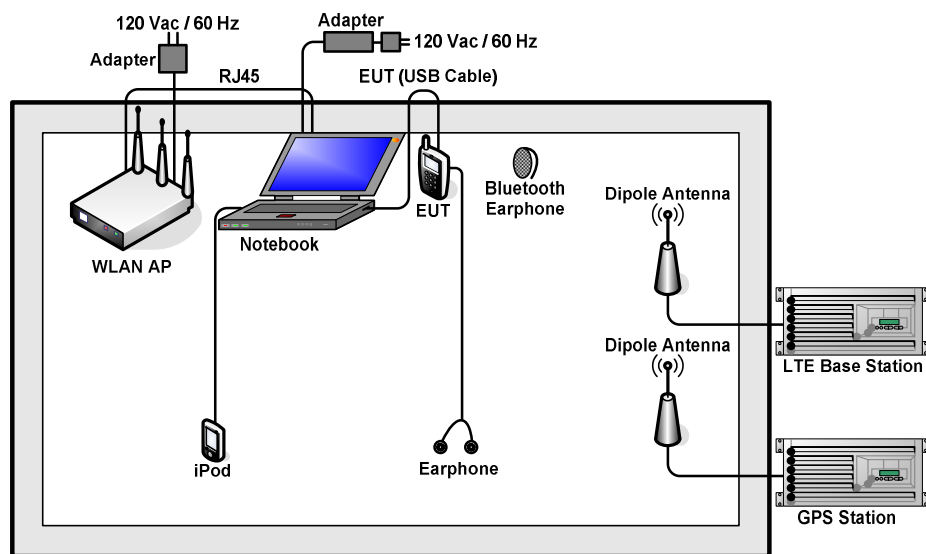
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 1) + Earphone + Camera<Fig.1> Mode 2: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 2) + Earphone + Camera<Fig.1> Mode 3: LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx<Fig.2> Mode 4: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 3) + Earphone + Camera<Fig.1>
Radiated Emissions < 1GHz	Mode 1: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 1) + Earphone + Camera<Fig.1> Mode 2: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 2) + Earphone + Camera<Fig.1> Mode 3: LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx<Fig.2> Mode 4: CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 3) + Earphone + Camera<Fig.1>
Radiated Emissions ≥ 1GHz	Mode 1: LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx<Fig.2>
Remark: 1. The worst case of AC is mode 2, and the USB Link mode of AC is mode 3; the test data of these modes were reported. 2. The worst case of RE < 1G is mode 3; only the test data of this mode was reported.	

2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
4.	WLAN AP	D-link	DIR-855	N/A	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
6.	Notebook	Dell	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
7.	iPod	Apple	A1199	FCC DoC	Shielded, 1.2 m	N/A
8.	SD Card	Kingston	8GB	N/A	N/A	N/A
9.	SD Card	SanDisk	Ultra	N/A	N/A	N/A
10.	Earphone	Lenovo	LH102	N/A	N/A	Unshielded, 1.2 m
11.	Earphone	Lenovo	SH100	N/A	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in CDMA2000 idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Notebook and EUT via USB cable.
2. Turn on GPS function to make the EUT receive continuous signals from GPS station.
3. Turn on camera to capture images.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

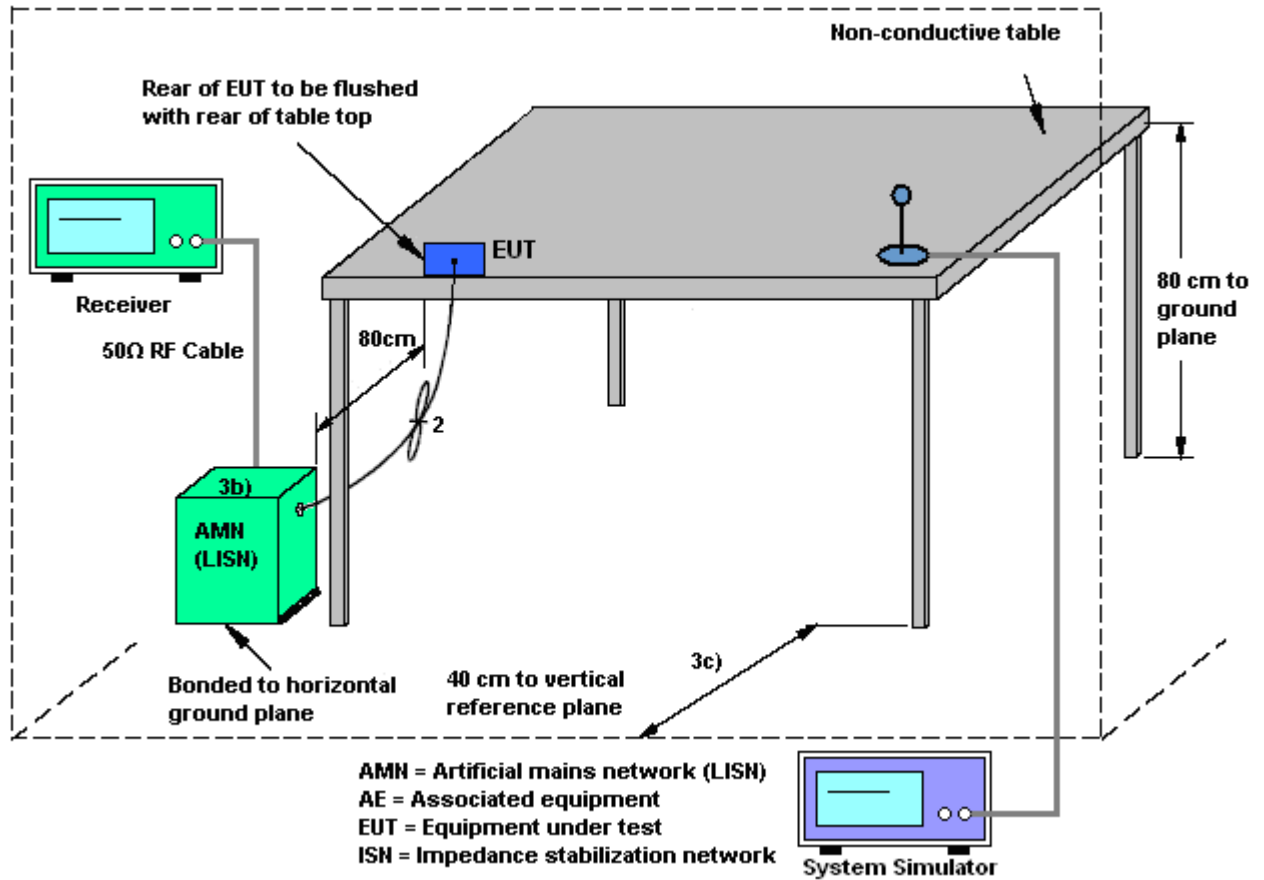
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

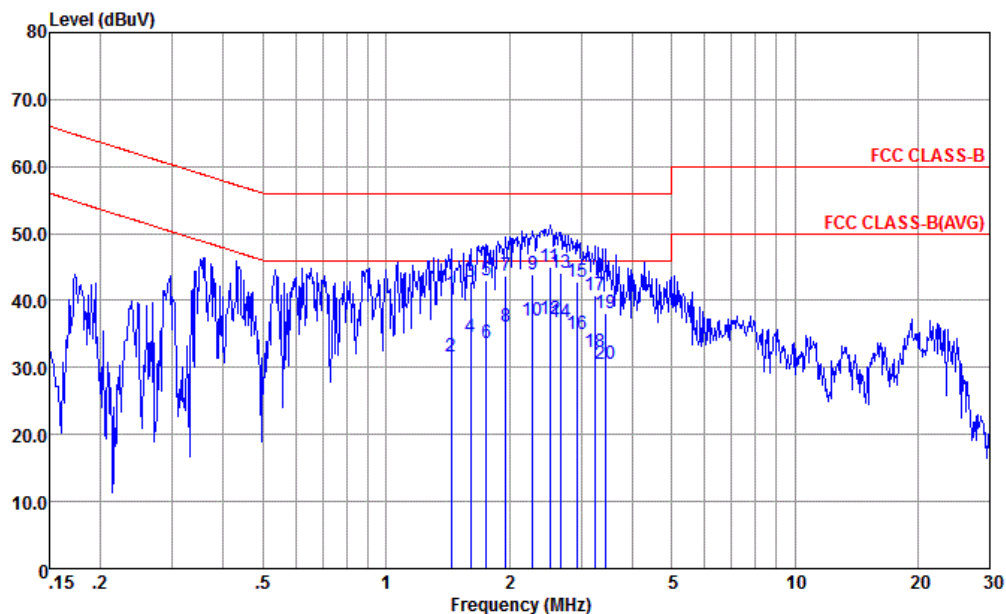
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~45%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 2) + Earphone + Camera		

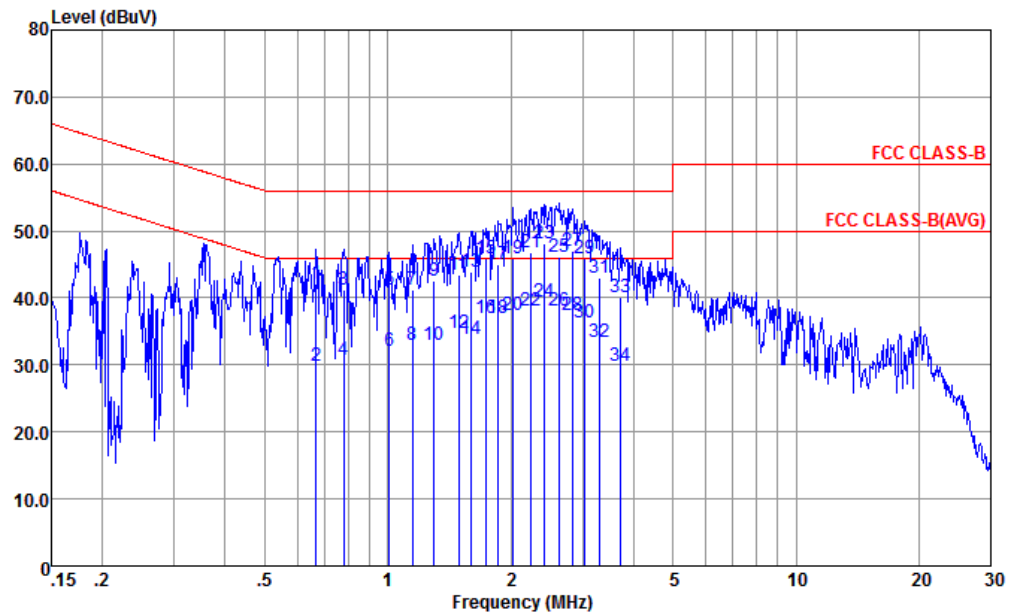


Site : CO01-KS
 Condition : FCC CLASS-B LISN-L-161017-060103 LINE
 Project : (FC) 601901-03
 mode : Mode 2
 : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	1.441	41.02	-14.98	56.00	30.60	0.23	10.19	QP
2	1.441	31.72	-14.28	46.00	21.30	0.23	10.19	Average
3	1.610	42.71	-13.29	56.00	32.29	0.23	10.19	QP
4	1.610	34.61	-11.39	46.00	24.19	0.23	10.19	Average
5	1.762	43.01	-12.99	56.00	32.60	0.22	10.19	QP
6	1.762	33.71	-12.29	46.00	23.30	0.22	10.19	Average
7	1.959	43.70	-12.30	56.00	33.30	0.21	10.19	QP
8	1.959	36.00	-10.00	46.00	25.60	0.21	10.19	Average
9	2.285	44.01	-11.99	56.00	33.60	0.21	10.20	QP
10	2.285	37.01	-8.99	46.00	26.60	0.21	10.20	Average
11	2.513	45.01	-10.99	56.00	34.60	0.21	10.20	QP
12 *	2.513	37.31	-8.69	46.00	26.90	0.21	10.20	Average
13	2.664	44.02	-11.98	56.00	33.60	0.21	10.21	QP
14	2.664	36.72	-9.28	46.00	26.30	0.21	10.21	Average
15	2.946	42.73	-13.27	56.00	32.30	0.21	10.22	QP
16	2.946	35.03	-10.97	46.00	24.60	0.21	10.22	Average
17	3.258	40.73	-15.27	56.00	30.30	0.21	10.22	QP
18	3.258	32.33	-13.67	46.00	21.90	0.21	10.22	Average
19	3.454	38.04	-17.96	56.00	27.60	0.21	10.23	QP
20	3.454	30.64	-15.36	46.00	20.20	0.21	10.23	Average



Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 2) + Earphone + Camera		

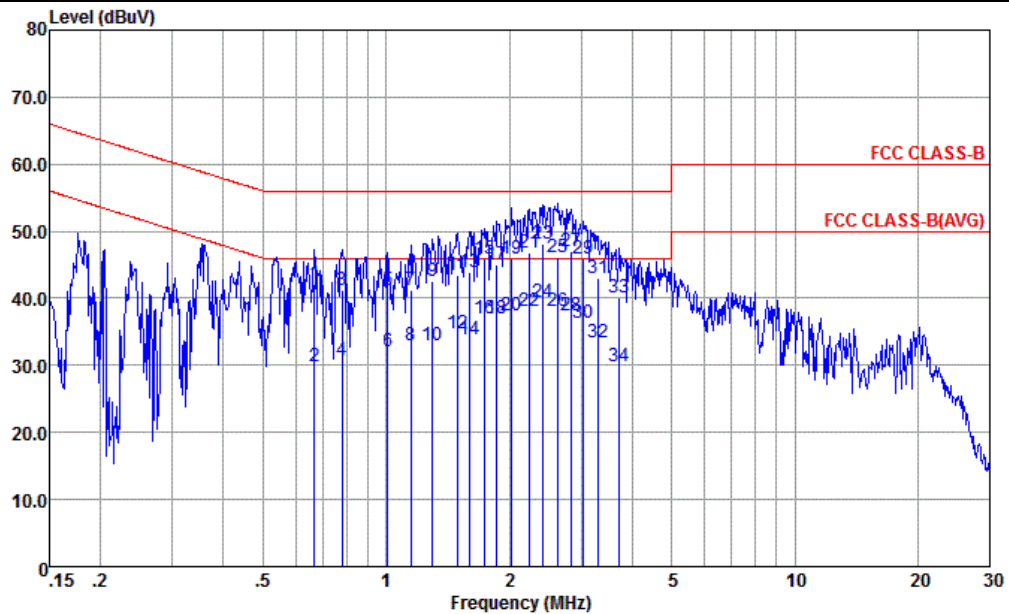


Site : CO01-KS
 Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
 Project : (FC) 601901-03
 mode : Mode 2
 : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.668	42.16	-13.84	56.00	31.60	0.38	10.18	QP
2	0.668	29.76	-16.24	46.00	19.20	0.38	10.18	Average
3	0.779	41.16	-14.84	56.00	30.60	0.39	10.17	QP
4	0.779	30.86	-15.14	46.00	20.30	0.39	10.17	Average
5	1.010	41.19	-14.81	56.00	30.60	0.40	10.19	QP
6	1.010	32.19	-13.81	46.00	21.60	0.40	10.19	Average
7	1.147	41.19	-14.81	56.00	30.60	0.40	10.19	QP
8	1.147	32.89	-13.11	46.00	22.30	0.40	10.19	Average
9	1.296	42.49	-13.51	56.00	31.90	0.40	10.19	QP
10	1.296	32.89	-13.11	46.00	22.30	0.40	10.19	Average
11	1.495	43.49	-12.51	56.00	32.89	0.41	10.19	QP
12	1.495	34.69	-11.31	46.00	24.09	0.41	10.19	Average
13	1.602	43.79	-12.21	56.00	33.19	0.41	10.19	QP
14	1.602	33.89	-12.11	46.00	23.29	0.41	10.19	Average
15	1.744	45.90	-10.10	56.00	35.30	0.41	10.19	QP
16	1.744	36.90	-9.10	46.00	26.30	0.41	10.19	Average
17	1.868	45.10	-10.90	56.00	34.50	0.41	10.19	QP



Test Mode :	Mode 2	Temperature :	22~24°C
Test Engineer :	Amos Zhang	Relative Humidity :	42~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA2000 BC0 Idle + Bluetooth Idle + USB Cable (Charging from Adapter 2) + Earphone + Camera		

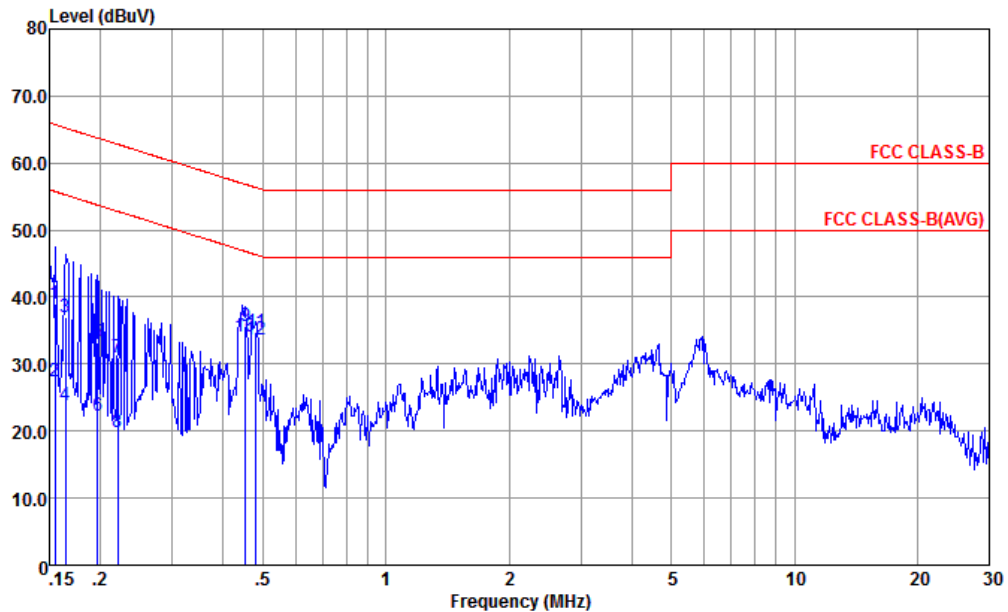


Site : CO01-KS
 Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
 Project : (FC) 601901-03
 mode : Mode 2
 : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	1.868	36.90	-9.10	46.00	26.30	0.41	10.19	Average
19	2.023	45.90	-10.10	56.00	35.30	0.41	10.19	QP
20	2.023	37.50	-8.50	46.00	26.90	0.41	10.19	Average
21	2.237	46.90	-9.10	56.00	36.29	0.41	10.20	QP
22	2.237	38.10	-7.90	46.00	27.49	0.41	10.20	Average
23	2.422	48.11	-7.89	56.00	37.51	0.40	10.20	QP
24 *	2.422	39.51	-6.49	46.00	28.91	0.40	10.20	Average
25	2.636	46.21	-9.79	56.00	35.60	0.40	10.21	QP
26	2.636	38.21	-7.79	46.00	27.60	0.40	10.21	Average
27	2.839	46.91	-9.09	56.00	36.30	0.40	10.21	QP
28	2.839	37.51	-8.49	46.00	26.90	0.40	10.21	Average
29	3.041	45.82	-10.18	56.00	35.20	0.40	10.22	QP
30	3.041	36.42	-9.58	46.00	25.80	0.40	10.22	Average
31	3.293	42.92	-13.08	56.00	32.30	0.39	10.23	QP
32	3.293	33.52	-12.48	46.00	22.90	0.39	10.23	Average
33	3.720	40.12	-15.88	56.00	29.50	0.39	10.23	QP
34	3.720	29.82	-16.18	46.00	19.20	0.39	10.23	Average



Test Mode :	Mode 3	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		

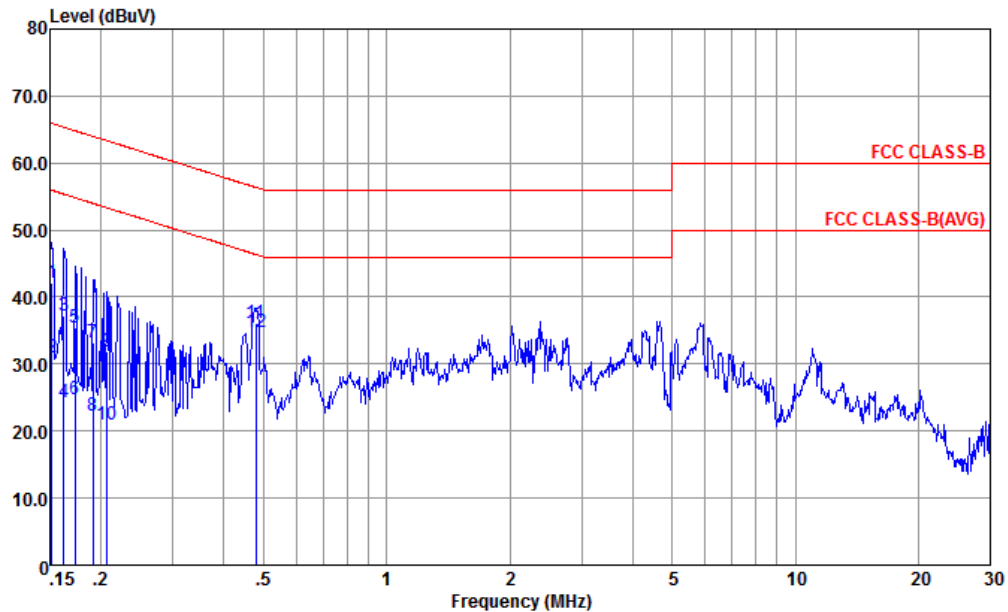


Site : CO01-KS
 Condition : FCC CLASS-B LISN-L-161017-060103 LINE
 Project : (FC) 601901-03
 mode : Mode 3
 : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.155	39.11	-26.63	65.74	28.20	0.52	10.39	QP
2	0.155	27.51	-28.23	55.74	16.60	0.52	10.39	Average
3	0.164	37.04	-28.21	65.25	26.21	0.46	10.37	QP
4	0.164	23.74	-31.51	55.25	12.91	0.46	10.37	Average
5	0.197	33.22	-30.54	63.76	22.59	0.29	10.34	QP
6	0.197	22.22	-31.54	53.76	11.59	0.29	10.34	Average
7	0.221	30.88	-31.91	62.79	20.30	0.27	10.31	QP
8	0.221	19.88	-32.91	52.79	9.30	0.27	10.31	Average
9	0.454	35.76	-21.04	56.80	25.30	0.27	10.19	QP
10	0.454	34.06	-12.74	46.80	23.60	0.27	10.19	Average
11	0.481	34.66	-21.66	56.32	24.20	0.27	10.19	QP
12 *	0.481	33.76	-12.56	46.32	23.30	0.27	10.19	Average



Test Mode :	Mode 3	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : CO01-KS
 Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
 Project : (FC) 601901-03
 mode : Mode 3
 : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	42.03	-23.88	65.91	31.30	0.34	10.39	QP
2	0.152	31.03	-24.88	55.91	20.30	0.34	10.39	Average
3	0.162	37.31	-28.03	65.34	26.59	0.34	10.38	QP
4	0.162	24.31	-31.03	55.34	13.59	0.34	10.38	Average
5	0.173	35.50	-29.31	64.81	24.80	0.34	10.36	QP
6	0.173	24.80	-30.01	54.81	14.10	0.34	10.36	Average
7	0.191	33.27	-30.71	63.98	22.60	0.33	10.34	QP
8	0.191	22.27	-31.71	53.98	11.60	0.33	10.34	Average
9	0.207	31.86	-31.46	63.32	21.20	0.33	10.33	QP
10	0.207	20.96	-32.36	53.32	10.30	0.33	10.33	Average
11	0.479	36.07	-20.29	56.36	25.50	0.38	10.19	QP
12 *	0.479	34.77	-11.59	46.36	24.20	0.38	10.19	Average

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

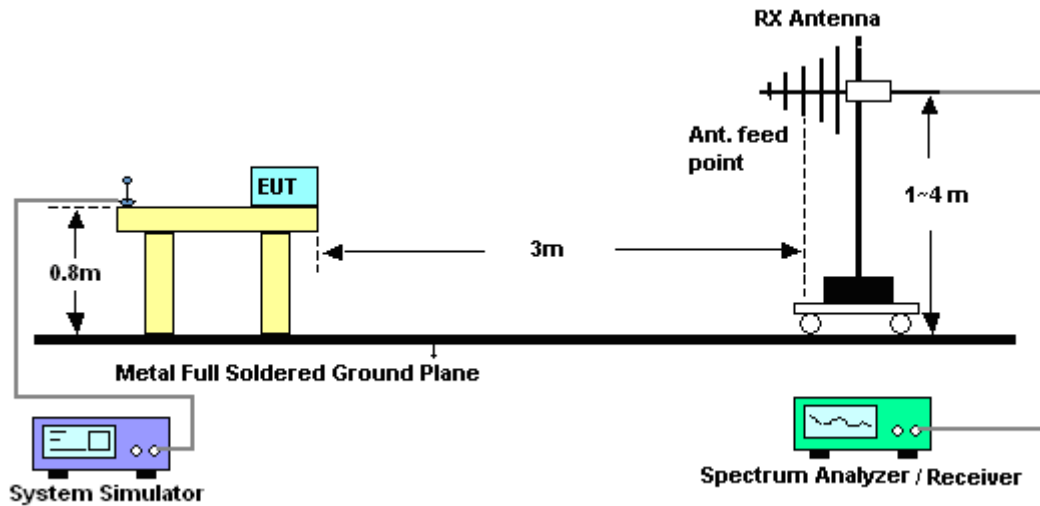
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

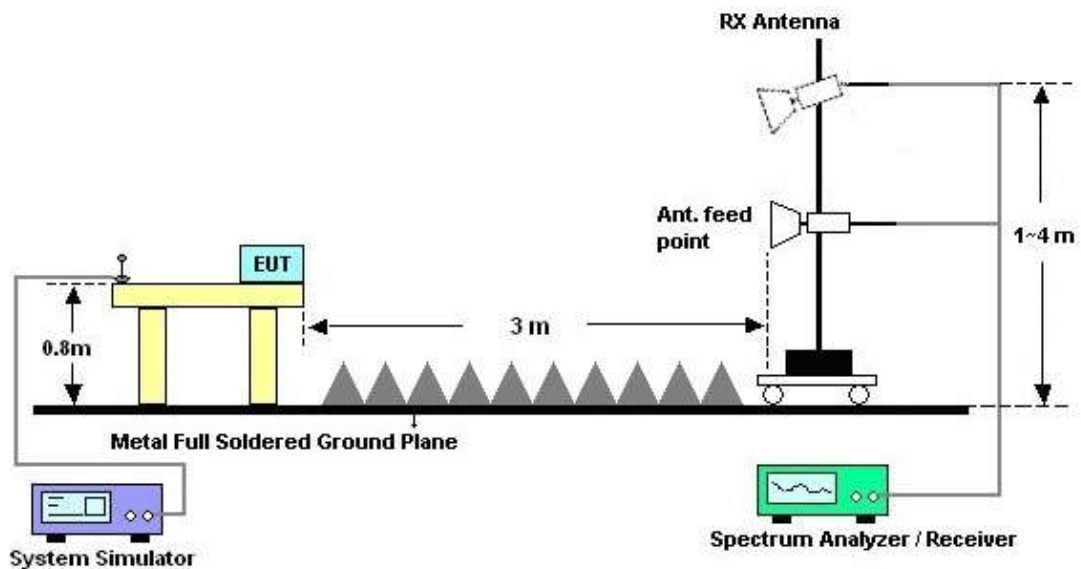
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dBμV/m) = 20 log Emission level (μV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamplifier Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



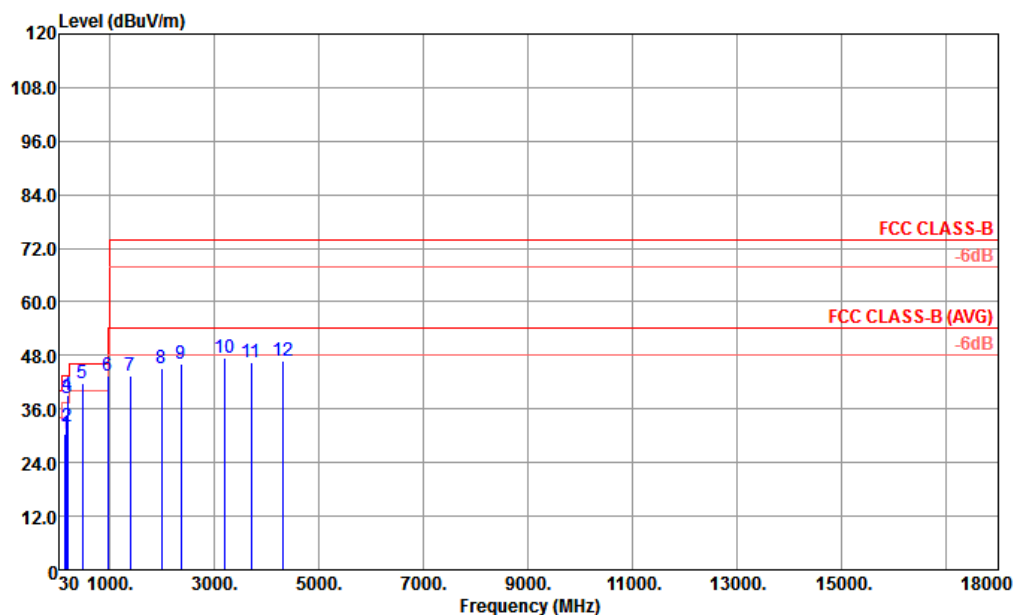
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 3	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		

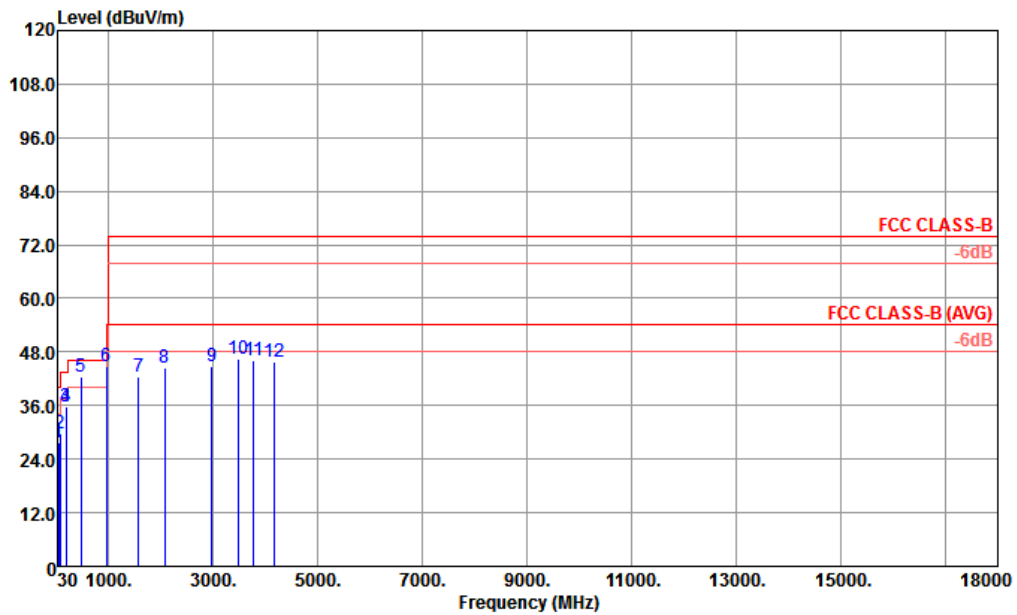


Site : 03CH02-KS
 Condition : FCC CLASS-B 3m 02 LF ANT HORIZONTAL
 Project : (FC) 601901-03
 Mode : 3
 IMEI : 990008870002388 #2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	cm	deg
1	153.12	30.26	-13.24	43.50	44.29	17.43	0.33	31.79	---	Peak
2	181.47	32.19	-11.31	43.50	47.10	16.41	0.38	31.70	---	Peak
3 !	194.16	38.42	-5.08	43.50	53.68	16.00	0.40	31.66	---	Peak
4 !	196.05	39.11	-4.39	43.50	54.41	15.94	0.41	31.65	---	Peak
5 !	479.90	41.83	-4.17	46.00	47.51	23.62	0.92	30.22	---	Peak
6 !	959.90	43.42	-2.58	46.00	40.00	28.70	1.75	27.03	100	0 QP
7	1388.00	43.49	-30.51	74.00	46.65	28.48	3.35	34.99	---	Peak
8	1994.00	45.18	-28.82	74.00	43.27	30.07	4.46	32.62	---	Peak
9	2372.00	46.02	-27.98	74.00	40.45	31.16	5.59	31.18	---	Peak
10	3204.00	47.33	-26.67	74.00	38.91	33.11	6.05	30.74	---	Peak
11	3711.00	46.51	-27.49	74.00	36.01	34.27	6.34	30.11	---	Peak
12	4323.00	46.77	-27.23	74.00	36.95	35.43	5.55	31.16	---	Peak



Test Mode :	Mode 3	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 4 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT VERTICAL
Project : (FC) 601901-03
Mode : 3
IMEI : 990008870002388 #2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	44.31	27.70	-12.30	40.00	39.06	20.57	0.13	32.06	---	Peak
2	79.68	29.73	-10.27	40.00	46.62	14.90	0.20	31.99	---	Peak
3	194.16	35.80	-7.70	43.50	51.06	16.00	0.40	31.66	---	Peak
4	196.05	35.80	-7.70	43.50	51.10	15.94	0.41	31.65	---	Peak
5 !	479.90	42.32	-3.68	46.00	48.00	23.62	0.92	30.22	100	0 QP
6 !	959.90	44.82	-1.18	46.00	41.40	28.70	1.75	27.03	100	0 QP
7	1578.00	42.52	-31.48	74.00	45.09	28.75	4.05	35.37	---	Peak
8	2080.00	44.41	-29.59	74.00	41.93	30.45	5.05	33.02	---	Peak
9	2978.00	44.91	-29.09	74.00	38.35	32.30	3.09	28.83	---	Peak
10	3477.00	46.62	-27.38	74.00	37.44	33.41	6.00	30.23	---	Peak
11	3777.00	46.01	-27.99	74.00	35.04	34.63	6.51	30.17	---	Peak
12	4167.00	45.90	-28.10	74.00	34.97	35.27	6.60	30.94	---	Peak



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 20, 2017	Jun. 21, 2017	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Jun. 21, 2017	Oct. 13, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Jun. 21, 2017	Oct. 13, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Jun. 21, 2017	Oct. 13, 2017	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Aug. 09, 2016	Jun. 23, 2017	Aug. 08, 2017	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44G,MAX 30dB	Apr.18, 2017	Jun. 23, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz-2GHz	Aug. 20, 2016	Jun. 23, 2017	Aug. 19, 2017	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Jun. 23, 2017	Oct. 21, 2017	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 09, 2016	Jun. 23, 2017	Aug. 08, 2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 13, 2016	Jun. 23, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jun. 23, 2017	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jun. 23, 2017	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jun. 23, 2017	NCR	Radiation (03CH02-KS)

NCR: No Calibration Required



5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.3dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.2dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.7dB
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Appendix B. Product Equality Declaration

ZTE CORPORATION

Product Change Description

As the applicant of the below model, [ZTE Corporation] declares that the product,

[Z233V]

[ZTE Corporation]

is the variant of the initial certified product,

[Z233VL]

[ZTE Corporation]

[Project Number: 16ZTE410]

FCC ID: SRQ-Z233VL

SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO

MMS/STK changes: NO

JAVA changes: NO

Other changes detailed: Yes, FOTA feature updated.

HARDWARE MODIFICATION:

Band changes: NO

Power Amplifier changes: NO

Antenna changes: NO

PCB Layout changes: NO

Components on PCB changes: YES, new chipset on WIFI/BT/FM(3 in 1) and Bluetooth/WLAN filter. But Z233V do not support WIFI-disabled via software. No function changed, no Bluetooth RF/Pro spec changed.

Additional information:

The new chip component is pin-for-pin compatible.

The new chip has the same basic function as the old chip,
No change in radio parameters has occurred.

LCD changes: NO

Speaker changes: NO

Camera changes: NO

Vibrator changes: NO

Bluetooth changes: YES, new chipset

FM changes: NO

Other changes: NO

MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: NO

Mechanical shell changes: YES, new silk screen

Other changes detailed: NO

ACCESSORY MODIFICATIONS:

Battery changes: NO

AC Adaptor changes: YES

Original Adaptor information:

Dokocom - STC-A508A-Z,STC-A508A-Z M5 - Revision: A

Ruijing - STC-A508A-Z,STC-A508A-Z M5 - Revision: A

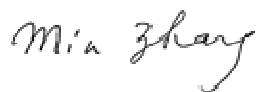
New Adaptor information:

Dokocom - STC-A508A-Z,STC-A508A-Z M5 - Revision: A1

Ruijing - STC-A508A-Z,STC-A508A-Z M5 - Revision: A1

Chenyang - STC-A508A-Z - Revision: A

Earphone changes: NO



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